



ORC

Offshore Racing Congress
World leader in rating technology

2020 ORC Club Certificate

Rating Office

Hellenic Sailing Federation
Offshore Committee
Επιτροπή
Ανοικτής Θαλάσσης
Ελληνικής
Ιστιοπλοϊκής Ομοσπονδίας



Certificate

Number **00461**
Issued On **01/07/2020**
ORC Ref **03420000LQR**
VPP Ver. **2020 1.02**
Valid until **28/02/2021**

Crew Weight

Default 519kg
Maximum **519kg**
Minimum* **389kg**
**when applied by the NoR and SI*
Non Manual Pwr **No**

Special Scoring

	ToD	ToT
Non Spin GPH	795.4	0.7543
Non Spin OSN	764.8	0.7846

Sails Limitations

Headsails **5** Spinnakers **4**

Spinnaker configuration
Symmetric: **Yes** **63.73**
Asymmetric: **Yes** **62.46**
Flying H/S: **No**
Spin. Pole: **Yes**

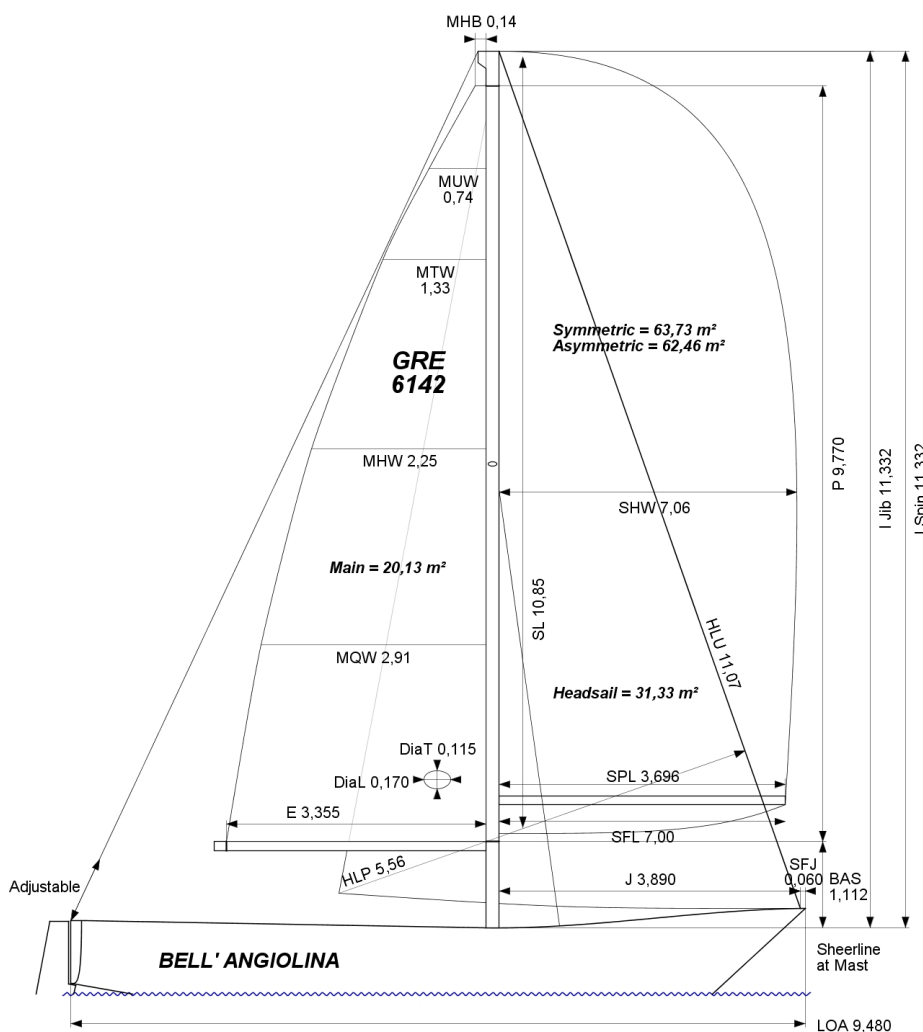
Class Division Length

CDL = 6.693

Stability (Estimated)

Limit Positive Stab.: **109.1°**
Stability Index: **111.1**

Owner



BOAT Name BELL' ANGIOLINA Sail Nr GRE-6142		GPH 760.3	HULL Data File GR6142 LOA 9.480m Offset File GR0063B.OFF MB 3.218m Displacement 4,825kg Draft 1.870m IMS Division Cruiser/Racer Dynamic All. 0.588% Plan Review Construction Solid Fiber Rigging No Aramid Core No Crew Arm Ex Carbon Rudder No Light Stanchions No IMSL 7.836m VCGD -0.028m Sink 14.89kg/mm RL 5.548m VCGM 0.123m WS 21.93m² LSM0 8.206m Displacement/Length ratio 8.7318 Water Ballast 0 Trim Tab No BLR Index 0.0000																																																						
CLASS Class BRIGAND 9.5 Designer CAMPER & NICHOLSON Builder CIMA Series 01/1974 Age Date 06/1974 Age Allowance 0.487%			<table border="1"> <thead> <tr><th colspan="7">SCORING OPTIONS</th></tr> <tr> <th></th> <th colspan="3">COASTAL / LONG DISTANCE</th> <th colspan="3">WINDWARD / LEEWARD</th> </tr> </thead> <tbody> <tr> <td>Time on Distance</td> <td colspan="3">733.6</td> <td colspan="3">818.7</td> </tr> <tr> <td>Time on Time</td> <td colspan="3">0.8179</td> <td colspan="3">0.8245</td> </tr> <tr> <td>Triple Number</td> <td>Low</td> <td>Medium</td> <td>High</td> <td>Low</td> <td>Medium</td> <td>High</td> </tr> <tr> <td>Time on Distance</td> <td>901.2</td> <td>666.7</td> <td>577.0</td> <td>1165.2</td> <td>830.9</td> <td>688.5</td> </tr> <tr> <td>Time on Time</td> <td>0.7490</td> <td>1.0125</td> <td>1.1699</td> <td>0.5793</td> <td>0.8124</td> <td>0.9804</td> </tr> </tbody> </table>						SCORING OPTIONS								COASTAL / LONG DISTANCE			WINDWARD / LEEWARD			Time on Distance	733.6			818.7			Time on Time	0.8179			0.8245			Triple Number	Low	Medium	High	Low	Medium	High	Time on Distance	901.2	666.7	577.0	1165.2	830.9	688.5	Time on Time	0.7490	1.0125	1.1699	0.5793	0.8124	0.9804
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COMMENTS			CENTERBOARD NA																																																						
PROPELLER Installation Shaft exposed PRD 0.410 Type Solid 2 blades PIPA 0.0179																																																									

BOAT	
Name BELL' ANGIOLINA File GR6142	Sail Nr GRE-6142 Data in meters/kilograms
RIG	
Forestay Tension Aft	Spreaders 1
Inner Stay Fixed	Runners/Checkstays 0
Carbon Mast No	Jib Furler No
Fiber Rigging No	Main Furler No
Non-Circular Rigging No	
Articulated Bowsprit No	
P 9.770	E 3.355 MDT1 0.115 MW
IG 11.332	J 3.890 MDL1 0.170 GO
ISP 11.332	SFJ 0.060 MDT2 0.115 BD
BAS 1.112	SPL 3.696 MDL2 0.170 MWT
FSD -3.000	TPS TL 0.000 MCG

INCLINING TEST AND FREEBOARDS	
Inclining Test Club Estimated VCG	
Flotation date 13/06/2002	SG 1.0260
FFM 1.066	FF 1.093 SFFP 0.710
FAM 0.809	FA 0.792 SAFF 9.300
LCF from stem on CL / on sheer	5.421 / 5.610
Maximum beam station from stem	5.420
RM Measured	80.2kg-m
RM Default	77.9kg-m
Limit of positive stability / Stab.Index	109.1° / 111.1
Freeboard at mast at 3.950	0.860



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2020
Measurements
Datasheet

MIZZEN RIG AND SAILS	
N/A	

PROPELLER	
Installation Shaft exposed	PRD 0.410
Type Solid 2 blades	PBW
Twin Screw No	PIPA 0.0179
PSA	PHL 0.052 ST3 0.083 ESL 0.815
PSD 0.025	ST1 0.028 ST4 0.045
PHD 0.051	ST2 0.147 ST5 0.200

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COMMENTS

MOVABLE BALLAST
N/A

CENTERBOARD
N/A

SAILS INVENTORY																
MAINSAIL (2)																
Id	MHB	MUW	MTW	MHW	MQW	Area	Measurer	Meas.Date	Manufacture	Material	Comment					
1	0.14	0.74	1.33	2.25	2.91	20.13		08/03/2012	ZOUGANELI	Dacron						
2	0.12	0.72	1.29	2.23	2.91	19.97		07/02/2014	QUANTUM	Dacron	TAFETA laminate					
HEADSAILS (2)																
Id	HHB	HUW	HTW	HHW	HQW	HLP	HLU	Ovr/tp	Area	Btn	Flying	Measurer	Meas.Date	Manufacture	Material	Comment
ORC						5.56	11.07	143%	31.33		No					* Copied from
2	0.05	0.59	1.15	2.39	3.70	5.05	10.94	130%	26.85		No		28/02/2011		Dacron	
SYMMETRIC SPINNAKERS (1)																
Id	SLU	SLE	SL	SHW	SFL	Area	Measurer	Meas.Date	Manufacture	Material	Comment					
ORC	10.85	10.85	10.85	7.06	0.00	63.73					* Copied from legacy *					
ASYMMETRIC SPINNAKERS (1)																
Id	SLU	SLE	SL	SHW	SFL	Area	Kind	Measurer	Meas.Date	Manufacture	Material	Comment				
1	11.45	10.87	11.16	6.67	6.90	62.46	asym		09/03/2007		Unknown					

MEASUREMENT INVENTORY				
Measurer				
Date				
Comment				
Internal Ballast total = 0.0				
Id	Item	Weight	Distance	VCG Description
OR	Anchor	51.0	0.80	*Legacy Anchor*
Id	Item	Weight	Description	

MEASUREMENT INVENTORY				
Id	Item	Weight	Distance	VCG Description

2020

ORC Club Certificate Appendix

BOAT			
Name	BELL' ANGIOLINA	Certificate Number	00461
Sail Nr	GRE-6142	Issued On	01/07/2020

TIME ALLOWANCES							
Wind Velocity	6 kt	8 kt	10 kt	12 kt	14 kt	16 kt	20 kt
Beat VMG	1374.3	1123.6	990.9	896.5	834.0	808.8	795.9
52°	885.9	739.3	654.5	601.1	575.5	563.3	556.6
60°	832.9	699.7	620.9	581.6	560.8	548.5	539.7
75°	797.4	671.4	598.5	566.6	547.7	533.4	514.6
90°	798.2	655.1	578.6	547.5	531.1	523.5	500.5
110°	784.6	643.6	572.5	541.6	518.5	497.8	473.0
120°	814.3	663.9	581.3	546.5	522.3	499.6	463.6
135°	905.6	724.9	615.8	565.0	537.9	515.2	473.3
150°	1050.9	822.7	692.2	605.1	563.1	538.5	497.0
Run VMG	1213.5	949.2	797.4	692.4	619.0	572.9	525.8
Selected Courses							
Windward / Leeward	1293.9	1036.4	894.1	794.4	726.5	690.8	660.8
Circular Random	1073.4	856.1	736.3	664.6	619.7	590.9	557.9
Coastal / Long Distance	1285.9	971.2	798.9	687.5	626.3	588.0	532.8
Non Spinnaker	1135.0	900.4	769.7	690.4	640.2	607.6	569.7

Velocity Prediction in Knots for True Wind Speeds							
Wind Velocity	6 kt	8 kt	10 kt	12 kt	14 kt	16 kt	20 kt
Beat Angles	44.3°	42.0°	42.0°	42.0°	41.3°	40.5°	40.1°
Beat VMG	2.62	3.20	3.63	4.02	4.32	4.45	4.52
52°	4.06	4.87	5.50	5.99	6.25	6.39	6.47
60°	4.32	5.14	5.80	6.19	6.42	6.56	6.67
75°	4.51	5.36	6.02	6.35	6.57	6.75	7.00
90°	4.51	5.50	6.22	6.57	6.78	6.88	7.19
110°	4.59	5.59	6.29	6.65	6.94	7.23	7.61
120°	4.42	5.42	6.19	6.59	6.89	7.21	7.77
135°	3.98	4.97	5.85	6.37	6.69	6.99	7.61
150°	3.43	4.38	5.20	5.95	6.39	6.68	7.24
Run VMG	2.97	3.79	4.51	5.20	5.82	6.28	6.85
Gybe Angles	148.0°	151.5°	153.0°	156.0°	174.0°	180.0°	180.0°